

VAPOUR RECOVERY SYSTEMS IN A STORAGE TANK FILLING PIPE

ABSTRACT

A vapor recovery system for use during filling of a tank installation with a volatile liquid. The tank has a fill-pipe for the introduction of the liquid into the tank wherein the exit to which fill-pipe is normally below the liquid level in the tank. The vapor recovery system includes a reduced cross-sectional area region of the fill-pipe and a duct extending from that region through the side wall of the fill-pipe into the ullage space above the liquid level in the tank. The system further has a valve assembly associated with the duct which valve assembly normally closes off the duct, but which valve assembly is opened by flow of liquid along the fill-pipe into the tank, such that vapor in the tank may be drawn along the duct from the ullage space by the reduced static pressure in the region of reduced cross-sectional area of the fill-pipe. A method of recovering vapor using such a system is also described.